

From the results of Table 4 to 5 (5-1, 5-2), instead of using conventional simple carbon black as a catalyst support in a polymer electrolyte fuel battery, by using the composite powder of the present invention as the support and a catalyst layer mainly comprising a mixture of this composite powder and platinum or a platinum alloy for the electrode, the power generation efficiency is greatly elevated and also the long-term durability over ten hundreds of hours is enhanced.